National Landscape Conservation System Summit

November 16, 2010 Focus Group Sessions

Focus Group 2: Integrating Science and Management

Note: This document summarizes comments from both BLM employees and non-BLM stakeholders during three focus group sessions held on November 16, 2010. These comments represent neither the consensus opinions of the group attending the session nor the official positions of the BLM.

Role of the NLCS for scientists/science

- NLCS needs to be integrated with science occurring outside NLCS.
- Wilderness can be representative of undeveloped landscapes, and the accompanying restrictions on management techniques make wilderness useful as a control in many studies.
- NLCS units can be used as pilot areas for testing new techniques, potentially also acting as laboratories for other agencies.
- NLCS lands can contribute to studies of habitat connectivity or core habitat.
- NLCS lands can be used to model ways of taking strategic action or identifying strategies for science that extend beyond individual units (e.g. for habitat connectivity or for studies of climate change that investigate multiple units simultaneously).
- NLCS units can act as centers for applied science.
- NLCS areas can provide refugia for organisms in the face of climate and land use change.
- NLCS could provide opportunities to pilot changes to business processes within the BLM (e.g., a method for revisiting land use plans between major revisions to keep them updated).
- NLCS could allow use of parallel adaptive management – a management alternative is compared with a second alternative rather than with the option of taking no management action.
- Corridors for protection of Wild and Scenic Rivers and National Scenic and Historic Trails can also be used as wildlife corridors.

Scale

- Questions were raised regarding the appropriate scale for science and management in NLCS – unit by unit scale, landscape scale, or some other scale?
- Resources to be protected are sometimes located outside of units, and buffers outside of units may be needed to protect resources inside units.
- Tiered ecosystem assessments were proposed as an idea for addressing some of the problems associated with scale.
- NLCS has potential to provide public benefit as an important resource for the scientific community.
- NLCS could be made more available for citizen science to draw the public into participation in science.
- Issues of the appropriate temporal and spatial scale for science were also discussed (e.g., how frequently and over how large a scale should monitoring occur?).

Data Management and Dissemination

- Dissemination of information, both from researchers to unit managers and from one unit to other BLM lands, is problematic.
- Existing databases and sites for sharing data need to be more effectively utilized.
- The role of a science portal as a means of disseminating information was frequently discussed.
- The NLCS may have different data management needs than the BLM as a whole – because units are designated for specific values, the needs for inventory, monitoring, etc. may require unique data management methods for NLCS or for particular units.
- Other options for better disseminating information that were suggested included a newsletter, email updates, or a peer-reviewed internal publication. Alternatively, research could be catalogued and distributed within the BLM.
- Better dissemination of data and synthetic research products would result in better management, especially adaptive management.

Defining Research Questions

- Many groups suggested the need to solicit research that addresses the questions most critical to managers; consequently, suggestions were made that a more formalized process is needed to collect and prioritize NLCS science needs.
- Synthesized products or reports are often of more use to managers than raw data; units can identify those needs to facilitate scientists working on products that are helpful to managers.
- All kinds of scientific information can be of use, including both natural and social sciences.
- For many units, good baseline data is still a necessity, especially regarding the values for which a unit was designated. Additional monitoring, including between Land Use Plan revisions, would be beneficial.
- Social science resource questions, particularly with respect to visitor use (and sustainable use) should be prioritized.
- Research should be increasingly multidisciplinary, to avoid duplicating research efforts and to incorporate the needs of partners and other agencies.

Establishment of Effective Partnerships

- Groups repeatedly discussed a need to collaborate more effectively with universities or other partners on science, which could be facilitated by making the potential advantages of working with NLCS units more clear.
- The group of science partners that NLCS attempts to actively engage should be expanded, for instance to include citizen science and traditional ecological knowledge as well as professional scientists.
- The possibility of establishing science advisory committees for individual units (or states) was discussed. Such committees would need clarification on how to interact with RACs, monument advisory committees, a BLM-wide science advisory board, etc. when and if those entities exist.
- Science coordinators or advisors (or advisory committees) can help translate scientific findings into language relevant to managers.

- Facilitating better cooperation at the day-to-day level, not just during high level reviews of planning documents, would help managers incorporate science more into everyday decisions.
- Small grants programs, or funding opportunities in general, were discussed as a way of establishing partnerships.
- More clear and consistent processes for funding and partnering with researchers were suggested as a way to keep science going in the NLCS – for instance, a streamlined permitting process would make it easier for both researchers and managers to access needed information.
- Partners need to be engaged from the beginning stages of identifying a problem, not just in the end stages of commenting on existing documents.
- Effective coordination between scientists and policymakers can help establish a common language, so that scientific uncertainty is understood by everyone involved and both management and policy can appropriately address uncertainty where it exists.
- Obtaining good baseline data would help make researchers more aware of the opportunities at NLCS units, facilitating more future research.
- Partnerships could be used to help with monitoring and inventory as well as other science needs.

<u>Science in BLM Business Processes</u>

- Units would like more time and funding to identify information needs, then accumulate and synthesize available information before it's required by the planning process.
- Increased use of inventory, assessment, and monitoring was suggested, possibly using some means of incentivizing more monitoring.
- Managers should be better apprised of the latest science: travel and training should be prioritized, managers should participate in science projects; universities could help with training needs.
- Most decisions are made at a much finer scale than the landscape, unit, or even RMP. Some decisions, such as the placement of power lines, are made at larger scales. Some mechanism for transferring information among scales needs to be developed and made clear to managers.

<u>Social Science</u>

- More specific ideas are needed about how to investigate social science questions.
- Major potential contributions for social science research include valuation of ecosystem services, identifying ways to benefit communities, and characterizing the economic effects of designation for NLCS units.
- For some areas, large amounts of scientific data have been generated, but the social science component is still missing.
- A challenge at many areas is that the values designated in a unit are not always aligned with the priorities of the local community. This challenge leads to ideas for a product – each individual designation could develop its own story aligning economic, social, and ecological values.
- Social thresholds can be as important as physical thresholds, particularly in the NLCS where the public may expect higher involvement of managers.